

REMARKS

Entry of this amendment and reconsideration of this application, as amended, is respectfully requested.

The indication of allowable subject matter is gratefully acknowledged.

Claims 37-42 and 51 have been canceled.

It is respectfully submitted that the amendments to the claims and cancellation of claims obviate the rejection of certain claims as allegedly anticipated by or, alternatively, as allegedly obvious over each of Linchan and Candau, and Kozakiewicz.

Claims 22-27, 30, 32-34, 43-52 and 54 were rejected as allegedly obvious over Jenkins in view of Kozakiewicz or GB '200. Applicants respectfully traverse.

Claims 22 and 45 recite, inter alia, that the average particle size of the polymerization products is from 30 to 600 nanometers, as disclosed in the specification at paragraph bridging pages 7 and 8.

Claim 30 refers to non-aqueous emulsions with a disperse phase of apolar reactants and a continuous polar organic phase. Jenkins does not disclose a non-aqueous polymerization process. Kozakiewicz and GB 2,118,200 disclose emulsions with a polar disperse phase containing water. An emulsion with an apolar disperse phase cannot be obtained by a combination of these three documents. The term "wherein said miniemulsion contains not greater than 10% by weight water" has been deleted from claim 30, note the miniemulsion is "nonaqueous".

In addition, claim 45 recites a water content of not greater than 10%. None of Kozakiewicz, Jenkins, JP 06/157668, Candau or GB 2,118,200 discloses the claimed combination of polymerization product particle size and water content below 10%.

The miniemulsions of JP 06/157668 and Kozakiewicz contain water in an amount of 20% or more. Jenkins refers to aqueous emulsions containing water in an amount of at least 10% by weight of the total composition. There is no disclosure in Jenkins of polymerization in miniemulsions nor is there any disclosure about particle size.

Candau discloses emulsions with a particle size of about 15 nanometer, about 30 nanometer or with a diameter of about 1 to 10 micrometer in the form of big droplets. With regard to the Examples, only Examples 1, 3 and 4 refer to particle size. Example 1 refers to an emulsion with 10.4% water and a particle radius of 16 nanometer. Example 3 describes an emulsion with 3.37% water and particle size of about 10 nanometer. Example 4 discloses a water content of 7.65% and particles of 6 nm and 23 nm.

The claims are also not believed to be obvious over any of Kozakiewicz, JP 06/157668, Candau or a combination of Kozakiewicz and Jenkins. It is respectfully submitted that it is not predictable that miniemulsions may be formulated effectively in a disperse phase of polar reactants in a continuous apolar organic phase by the addition of an osmotically stabilizing component, wherein the miniemulsions lead to well-defined and stable polymer products, preferably in the form of lattices. The osmotically stabilizing agent prevents alteration of particle size during the polymerization process. None of the documents cited by the Examiner refers to an osmotically stabilizing component in the disperse phase. Examples 1, 3 and 4 of Candau demonstrate the unpredictability of particle size in emulsion polymerization of acrylamide when an osmotically stabilizing component is missing. During polymerization, the particle size increases by a factor of about 4 in Examples 1 and 4. In contrast, Example 3 indicates an increase of only about 40%. Examples 1, 3 and 4 differ in the proportions of acrylamide, water, organic solvent, surfactant and initiator. There is no teaching in Candau or

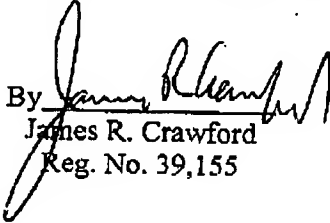
any of the other cited references as to how such alterations in particle size could be predicted, nor is there a teaching in the cited references as to how to prevent undesired alterations of the particle size of the polymerization product relative to that of the reactants emulsion.

In view of the foregoing, allowance is respectfully requested.

The Commissioner is hereby authorized to charge any additional fees due to our Deposit Account No. 50-0624, under Order No. NY-HUBR-1202-US.

Respectfully submitted

FULBRIGHT & JAWORSKI L.L.P.

By   
James R. Crawford  
Reg. No. 39,155

666 Fifth Avenue  
New York, New York 10103  
(212) 318-3148